

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS PO Box 1450 Alexasofan, Virginia 22313-1450 www.repto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO. CONFIRMATION NO.	
10/569,484	12/14/2006	Joerg Eickemeyer	P29283	3437
7055 GREENBLUM	7590 06/24/2005 M & BERNSTEIN, P.L.C	EXAMINER		
1950 ROLAND CLARKE PLACE			BONK, TERESA	
RESTON, VA	20191		ART UNIT	PAPER NUMBER
			3725	
			NOTIFICATION DATE	DELIVERY MODE
			06/24/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com pto@gbpatent.com

Office Action Summary

Application No.	Applicant(s)	Applicant(s)		
10/569,484	EICKEMEYER ET AL.			
Examiner	Art Unit			
Teresa M. Bonk	3725			

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Rep	ply	
WHICHEVE - Extensions of after SIX (6) N - If NO period for Failure to repl Any reply rece	ENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) YER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION of the original of the many be available under the provisions of 37 CFt 1.38(a), in no event, however, may a reply be limely filled of the communication. Yet in the form the making date of the communication. However, the provision of the pr	
Status		
2a)⊠ This a 3)⊡ Since	ponsive to communication(s) filed on <u>06 April 2009</u> . action is FINAL. ≥b) This action is non-final. ⇒e this application is in condition for allowance except for formal matters, prosecution as to the med in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.	nerits is
Disposition of	f Claims	
4a) Of 5) ☐ Claim 6) ☑ Claim 7) ☐ Claim	m(s) 1-15 is/are pending in the application. If the above claim(s) is/are withdrawn from consideration. If the above claim(s) is/are withdrawn from consideration. If the above claim(s) is/are allowed. If the above claim(s) is/are rejected. If the above claim(s) is/are objected to.	
Application Pa	apers	
10)☐ The dr Applic Replac	specification is objected to by the Examiner. drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. icant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a), acement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO	
Priority under	r 35 U.S.C. § 119	
a)	wheedgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). b)	tage

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s

- 1) Notice of References Cited (PTO-892)
- Notice of Draftsperson's Patent Drawing Review (PTO-948)
 Information Disclosure Statement(s) (PTO/S5/05)
- Paper No(s)/Mail Date 4/6/09.

4)	Interview	Summary	(PTO-413

Paper No(s)/Mail Date. 5) Notice of Informal Patent Application

6) Other:

Art Unit: 3725

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 6 and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Goyal (US PGPUB 2004/0003768), newly cited. Goyal discloses a method for producing metallic flat wires or strips with a cube texture, comprising processing a material based on nickel, copper, gold, or silver (Paragraph 0028) into a wire ((Paragraph 0010) having an essentially circular cross section (Paragraph 0013) by a cold drawing method with high-grade forming over multiple drawing stages (Paragraphs 0024 and 0033), achieving a total cross-sectional reduction $\epsilon g \geq 90\%$ (Paragraphs 0066 and 0067), and then further processing the wire by further forming and annealing methods (Paragraphs 0018-0021) into a flat wire or a strip with a cube texture and having a width that can be adjusted in a defined manner, the defined width being determined and adjusted by the wire cross section of the wire having an essentially circular cross section and degrees of forming of further forming steps for the wire.

With regards to claims 6 and 12-15, 6. Goyal also discloses not including an intermediate treatment (secondary recrystallization) of the wire before the further forming and annealing methods (Examples 3 and 10-14).

Application/Control Number: 10/569,484 Page 3

Art Unit: 3725

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior at are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 5, 11, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goyal in view of Hodsden (US Patent 6,024,080), previously cited. Goyal discloses the invention substantially as claimed except for wherein the cold drawing method is carried out in respectively alternating drawing directions (reversibly). Hodsden teaches a cold drawing method carried out in respectively alternating drawing directions (reversibly), Claim 3. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to enable the drawing method to have alternating drawing directions because combining prior art elements according to known methods yields predictable results. It is also noted that in the Goyal reference, which discloses both rolling and drawing, the rolling method is disclosed as reverse rolling in each pass (Paragraph 0088).

Claims 3-4, 7-8, and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goyal in view of Dameron, Jr. et al. (US Patent 4,280,857), previously cited and Bertolini (US Patent 6,449,997), previously cited. Goyal discloses the invention substantially as claimed except for wherein the cold drawing method is implemented as slip drawing by drawing dies having drawing angles 2 $\alpha \le 12^{\circ}$. Dameron, Jr. et al. teaches a drawing and annealing system that uses a conventional slip drawing machine (Column 2, lines 20-22). Therefore, it would have

Art Unit: 3725

been obvious to one of ordinary skill in the art at the time the invention was made to implement the cold drawing method as slip drawing because "such an operation is highly efficient and economical" (Column 2, lines 34-35). Bertolini teaches a cold drawing wire implemented by drawing dies having drawing angle of 2 $\alpha \le 12$ (Column 2, lines 63-67). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the particular drawing angles to the slip drawing die because applying a known technique to a known device ready for improvement to yield predictable results.

Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goyal in view of Hodsden and Dameron, Jr. et al and Bertolini. The combination of Goyal and Hodsden disclose the invention substantially as claimed except for wherein the cold drawing method is implemented as slip drawing by drawing dies having drawing angles $2 \alpha \le 12^{\circ}$. Dameron, Jr. et al. teaches a drawing and annealing system that uses a conventional slip drawing machine (Column 2, lines 20-22). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the cold drawing method as slip drawing because "such an operation is highly efficient and economical" (Column 2, lines 34-35). Bertolini teaches a cold drawing wire implemented by drawing dies having drawing angle of $2 \alpha \le 12$ (Column 2, lines 63-67). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the particular drawing angles to the slip drawing die because applying a known technique to a known device ready for improvement to yield predictable results.

Response to Arguments

Applicant's arguments filed April 6, 2009 have been fully considered but they are not persuasive.

The Applicant's arguments pertaining to the "cube texture" are not on point due to the alternative phrasing of the claim, "flat wires" or "strips with a cube texture." Therefore, because flat wires (a tape article is considered to be a wire, Paragraph 0010) are disclosed in the Goyal reference the limitation has been met. Additionally, the Applicant argues about the "recrystallization principle" differences between the Goyal and the present invention which is also not on point since these terms are not found in the claims.

With regards to the "essentially circular cross section" limitation, the Examiner maintains that this limitation is an intermediate in the process and since the surrounding steps are met by the Goyal reference the material would inherently demonstrate this feature although it is not explicitly stated in the reference.

With regards to the "multiple drawing stages" limitation, it is noted that Paragraphs 0024 and 0033 state that a providing step can include "hot or cold wire drawing, hot or cold rolling, and hot or cold forging" and Goyal goes on to provide Examples that state "each pass" of the rolling (which can also be drawing or forging) which refers to multiple stages.

With regards to the "total cross-sectional reduction" limitation, Paragraphs 006 and 0067 disclose "at least a 60%" reduction and an example stating a "99%" reduction which meets the greater than or equal to 75% requirement.

The limitation requiring "further processing the wire by further forming and annealing methods" was cited as being met in Paragraph 0018-0021 of Goyal. A further forming method

Application/Control Number: 10/569,484

Art Unit: 3725

may include, from Paragraph 0019, "a step depositing an epitaxial nitride layer on the single crystal metal tape, followed by oxidating of the nitride layer to form an epitaxial oxide layer." In addition, the "annealing" limitation is addressed in Paragraph 0018 of Goyal including different forms of annealing via heated zones including "resistive heating, electron beams, laser beams, or infrared or induction heating."

With regards to the "width" limitations, the Goyal reference has set forth a "determined" width in Paragraph 0010 and has also set forth further "degrees of forming" the workpiece; therefore its parameters, including the width, are "adjusted."

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Application/Control Number: 10/569,484

Art Unit: 3725

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Teresa M. Bonk whose telephone number is (571)272-1901. The examiner can normally be reached on Monday-Friday 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dana Ross can be reached on 571-272-4480. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Teresa M. Bonk Examiner Art Unit 3725 /Dana Ross/ Supervisory Patent Examiner, Art Unit 3725